

ABSTRACT OF THE DISCLOSURE

The invention provides an antibody or a fragment thereof having specific
5 binding affinity for superficial zone protein (SZP) or a variant, fragment, or protein
core thereof, wherein the binding affinity of the antibody or fragment thereof for
human superficial zone protein is the same or greater than the binding affinity for
bovine superficial zone protein in a competitive binding assay, IAsys analysis, or
BIAcore analysis. The present invention further provides hybridoma cells that
10 produce the monoclonal antibody and antibody reagent kits comprising the
antibody or fragment of the invention. Further provided by the invention are
methods of SZP detection, methods of diagnosing a degenerative joint condition,
and screening methods related to the use of the antibody or fragment thereof.